Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A recombinant human C1 inhibitor which is characterised in that its plasma circulatory half-life has been changed by modification of an O-linked carbohydrate, wherein the modification has been carried out by *in vitro* incubation with an enzyme preparation comprising one or more O-linked carbohydrate modifying enzymes or *in vivo* by co-expression of the recombinant human C1 inhibitor with one or more recombinant O-linked carbohydrate modifying enzymes in a cultured transgenic cell ~~line or a non-human transgenic animal~~.

2. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that its plasma circulatory half-life has been extended compared to the half-life of an unmodified C1 inhibitor.

3. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that its plasma circulatory half-life has been reduced compared to the half-life of an unmodified C1 inhibitor.

4. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that the plasma circulatory half-life of the modified inhibitor has decreased as compared to, or increased to at least 1.5, 2, 3 or 4 times the value of, the half-life of the unmodified inhibitor.

5. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that the modification comprises sialylation of the O-linked carbohydrate or the removal of one or more non-sialylated O-linked carbohydrates.

6. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 5, which is characterised in that the non-sialylated O-linked carbohydrate is galactose or Gal(β1-3)GalNAc.

7. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that the O-linked carbohydrate is modified by incubation with an enzyme preparation which comprises one or more O-linked carbohydrate modifying enzymes.

8. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 7, which is characterised in that the enzyme preparation comprises one or more sialyltransferases, galactosidases or endo-acetyl-galactosaminidases.

9. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 8, which is characterised in that the enzyme preparation comprises sialyltransferases ST3Gal III and ST3Gal I, or endo-α-N-acetyl-galactosaminidase.

10. (Currently Amended) The[[A]] recombinant human C1 inhibitor according to claim 1, which is characterised in that the modification is an *in vitro* modification.

11-12. (Canceled)

13. (Currently Amended) A pharmaceutical composition comprising a human recombinant C1 inhibitor according to claim 1.

14-15. (Canceled)

16. (Currently Amended) A method for extending the blood circulatory half-life of a glycoprotein or of a glycoprotein comprising compound, wherein the method comprises removing one or more non-sialylated O-linked carbohydrates from the glycoprotein by *in vitro* incubation with an enzyme preparation comprising one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates or *in vivo* by co-expression of [[the]] a recombinant glycoprotein with one or more recombinant enzymes capable of removing the one

or more non-sialylated O-linked carbohydrates of the recombinant glycoprotein in a cultured transgenic cell ~~line or a non-human transgenic animal~~.

17. (Previously Presented) The method according to claim 16, wherein the non-sialylated carbohydrate is galactose or Gal(β1-3)GalNAc.

18. (Previously Presented) The method according to claim 16, wherein the one or more non-sialylated O-linked carbohydrates is removed by *in vitro* incubation with an enzyme preparation comprising one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates.

19. (Original) The method according to claim 18, wherein the enzyme preparation comprises galactosidase or endo-acetylgalactosaminidase.

20. (Previously Presented) The method according to claim 18, wherein the enzyme preparation comprises one or more recombinantly produced enzymes.

21. (Currently Amended) The method according to claim 16, wherein the one or more non-sialylated O-linked carbohydrates is removed *in vivo* by co-expression of the recombinant glycoprotein with a nucleic acid encoding a galactosidase or an endo-acetylgalaotosaminidase in a cultured transgenic cell ~~line or in a non-human transgenic animal~~.

22. (Previously Presented) The method according to claim 16, wherein the glycoprotein is a C1 inhibitor.